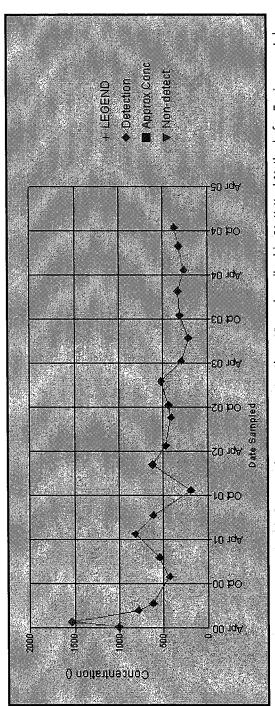
Mann-Kendall Trend for Trichloroethene in MW-408D

Value	21	529.2	313.6	0.592	46/164	-118	-3,533	-100,0%	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease

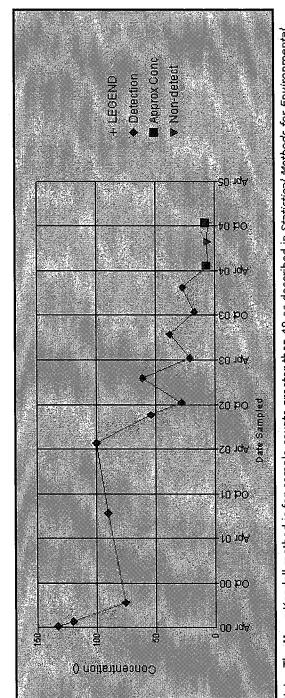


Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note; The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental*

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Delphi Corporation Vandalia Facility Vandalia, OH

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Mann-Kendall

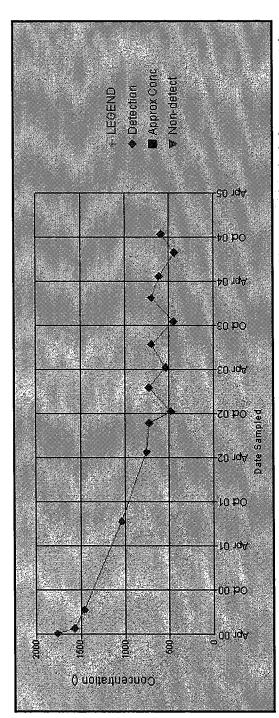
Value	15	52,4	42.5	0,811	11/94	-83	-4,058	-100.0%	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental

Mann-Kendall Trend for Trichloroethene in MW-410D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Sample Count 15 Average 837.3 Standard Deviation 424.3 Coefficient of Variation 0.507 Mann-Kendall Positives/Negatives 14/89 Mann-Kendall Statistic -75 Z Test Statistic -75 Z Test Statistic 100.0% Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Statistic	Value
Average 837.3 Standard Deviation 424.3 Coefficient of Variation 0.507 Mann-Kendall Positives/Negatives 14/89 Mann-Kendall S statistic -75 Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Sample Count	15
Standard Deviation 424.3 Coefficient of Variation 0.507 Mann-Kendall Positives/Negatives 14/89 Mann-Kendall S statistic -75 Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Average	837.3
Coefficient of Variation 0.507 Mann-Kendall Positives/Negatives 14/89 Mann-Kendall S statistic -75 Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Standard Deviation	424.3
Mann-Kendall Positives/Negatives 14/89 Mann-Kendall S statistic -75 Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Coefficient of Variation	0.507
Mann-Kendall S statistic -75 Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Mann-Kendall Positives/Negatives	14/89
Z Test Statistic -3.671 Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Mann-Kendall S statistic	-75
Significance Level -100.0% Trend (80% Significance Threshold) Decrease	Z Test Statistic	-3,671
Trend (80% Significance Threshold) Decrease	Significance Level	-100.0%
	Trend (80% Significance Threshold)	Decrease

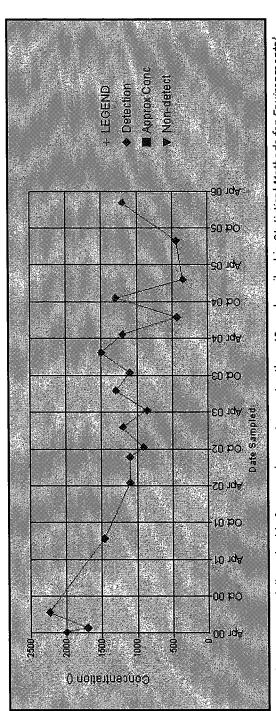


Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendali method is for sample counts greater than 40 as described in *Statistical Methods for Environmental* sizes <=40.

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g\L Delphi Corporation Vandalia Facility Vandalia, OH

Mann-Kendall Trend for Trichloroethene in MW-411D

Trend (80% Significance Threshold) Decrease 1,188.3 43/103 -2,248 -97,5% Value 502.7 0,423 8 8 Mann-Kendall Positives/Negatives Mann-Kendall S statistic Coefficient of Variation Standard Deviation Significance Level Z Test Statistic Sample Count Statistic Average



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environmental* sizes <=40.

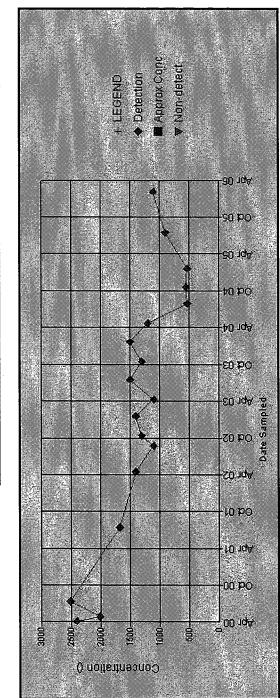
5/15/2006

Mann-Kendall Trend for Trichloroethene in MW-412D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Vandalia, OH

Delphi Corporation

Vandalia Facility

Statistic	Value
Sample Count	18
Average	1,335.0
Standard Deviation	268,0
Coefficient of Variation	0,425
Mann-Kendall Positives/Negatives	28/118
Mann-Kendall S statistic	-90
Z Test Statistic	066'6-
Significance Level	%6'66-
Trend (80% Significance Threshold) Decrease	Decrease



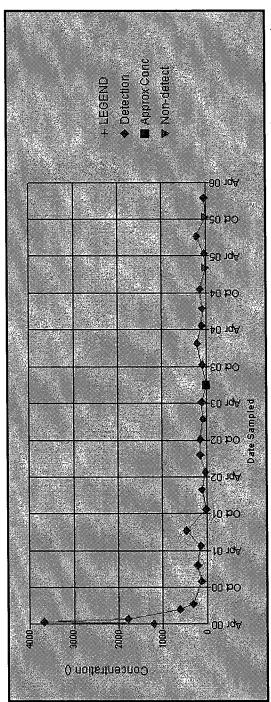
Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environmental* sizes <=40,

Delphi Corporation Vandalia Facility Vandalia, OH

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-413D

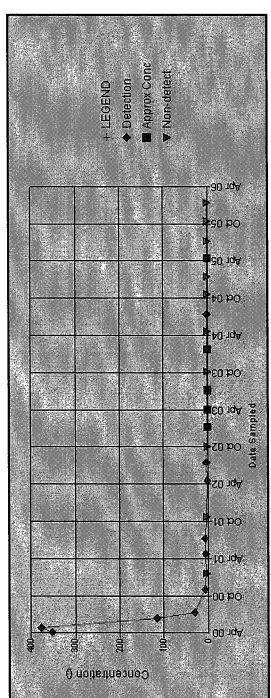
Statistic	Value
Sample Count	27
Average	370.9
Standard Deviation	771.0
Coefficient of Variation	2.08
Mann-Kendall Positives/Negatives	85/265
Mann-Kendall S statistic	-180
Z Test Statistic	-3,732
Significance Level	-100.0%
Trend (80% Significance Threshold) Decrease	Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environmental* sizes <=40,

in MW-414D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in μg/L Mann-K

cendall Trend	Kendall Trend for Trichloroethene in MW-	ene in N	- M.V.
Š	Statistic	Yalue	
San	Sample Count	25	
a	Average	36.5	
Standa	Standard Deviation	101,5	
Coefficie	Coefficient of Variation	2.78	
Mann-Kendall	Mann-Kendall Positives/Negatives	26/237	
Mann-Ke	Mann-Kendall S statistic	-211	
Z Te	Z Test Statistic	-5,034	
Signifi	Significance Level	-100.0%	
Trend (80% Si	Trend (80% Significance Threshold) Decrease	Decrease	



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental sizes <=40.

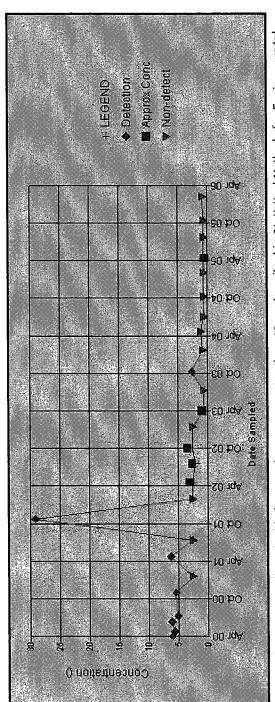
Delphi Corporation Vandalia Facility

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g\L Vandalia, OH

Mann-Kendall Trend for Trichloroethene in MW-416D

05-44481-rdd

-								٠	9	
,	26	3.54	5.62	1.59	47/255	-208	-4,606	-100,0%	Decrea	
CIMIC	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease	



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40.

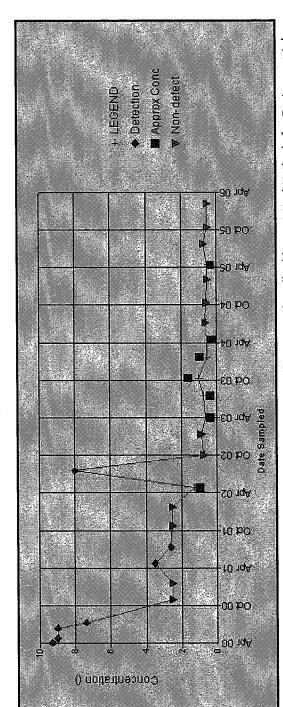
5/15/2006

Mann-Kendall Trend for Trichloroethene in MW-417D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g\L Vandalia, OH

Delphi Corporation

Vandalia Facility

Statistic	Value
Sample Count	26
Average	2,64
Standard Deviation	3,09
Coefficient of Variation	1,17
Mann-Kendall Positives/Negatives	48/265
Mann-Kendall S statistic	-217
Z Test Statistic	-4.779
Significance Level	-100.0%
Trend (80% Significance Threshold) Decrease	Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40.

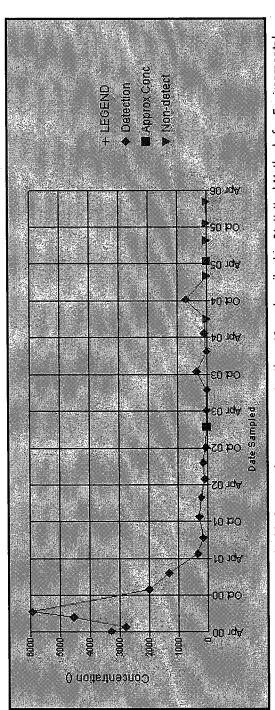
Haley & Aldrich, Inc.

Delphi Corporation Vandalia Facility Vandalia, OH

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in μ g\L

Mann-Kendall Trend for Trichloroethene in MW-418D

									e e	
A GIGG	27	828.2	1,555.0	1,88	48/303	-255	-5.295	-100.0%	Decreas	
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease	



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40,

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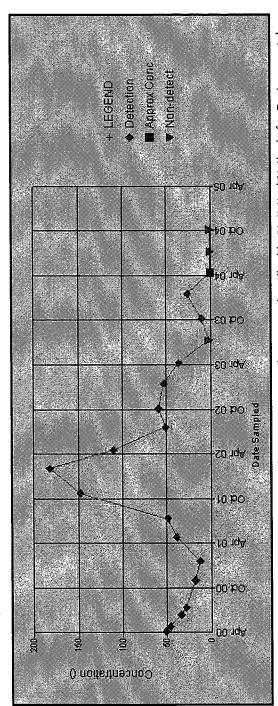
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Delphi Corporation Vandalia Facility Vandalia, OH Trend Since Deep Bedrock Gro

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g\L

Mann-Kendall Trend for Trichloroethene in MW-419D

Statistic	Yalue
Sample Count	21
Average	45.6
Standard Deviation	47.8
Coefficient of Variation	1,05
Mann-Kendall Positives/Negatives	72/137
Mann-Kendall S statistic	-65
Z Test Statistic	-1,933
Significance Level	-94.7%
Trend (80% Significance Threshold) Decrease	Decrease



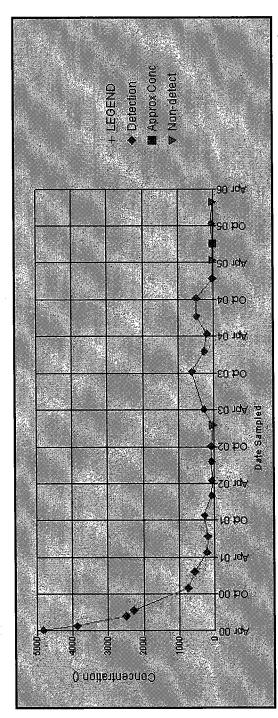
Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environment*al sizes <=40,

Delphi Corporation Vandalia Facility Vandalia, OH

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in μ g\L

Mann-Kendall Trend for Trichloroethene in MW-420D

Statistic	Value
Sample Count	. 52
Average	722.2
Standard Deviation	1,271.2
Coefficient of Variation	1.76
Mann-Kendall Positives/Negatives	65/235
Mann-Kendall S statistic	-170
Z Test Statistic	-3,947
Significance Level	-100.0%
Trend (80% Significance Threshold) Decrease	Decrease



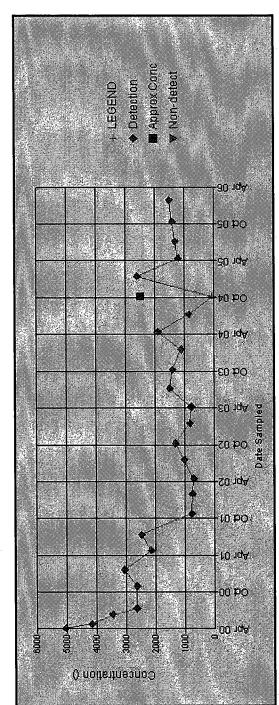
Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40.

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5/15/2006

Mann-Kendall Trend for Trichloroethene in MW-420M Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g\L

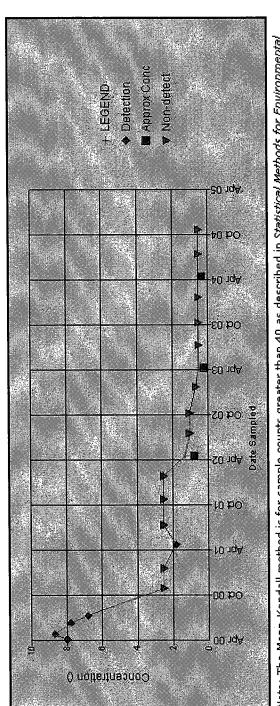
Average	Statistic
eviation 1,136.1 Variation 0.604 ives/Negatives 121/201 S statistic -80 atistic -1,743 e Level -91.9% ance Threshold) Decrease	Sample Count
1,136.1 1,136.1 Variation 0.604 ives/Negatives 121/201 Statistic -80 atistic -1.743 e Level -91.9% ance Threshold Decrease	
Variation 0.604 ives/Negatives 121/201 S statistic -80 atistic -1.743 e Level -91.9% ance Threshold) Decrease	eviation
ives/Negatives 121/201 S statistic -80 atistic -1.743 e Level -91.9% ance Threshold) Decrease	Coefficient of Variation
S statistic -80 atistic -1.743 e Level -91.9% ance Threshold) Decrease	Mann-Kendall Positives/Negatives
e Level -91.9% ance Threshold) Decrease	Mann-Kendall S statistic
e Level -91.9% ance Threshold) Decrease	Z Test Statistic
ance Threshold) Decrease	Significance Level
	cance Threshold)



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40,

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 – Concentration in μ g/L Vandalia, OH

Mann-Kendall Trend for Trichloroethene in MW-421D	Statistic Value	Sample Count 21	Average 2.48	Standard Deviation 2.80	Coefficient of Variation 1.13	Mann-Kendall Positives/Negatives 14/175	Mann-Kendall S statistic -161	Z Test Statistic -4,909	Significance Level -100,0%	Trend (80% Significance Threshold) Decrease
Mann-Kendall Tre	-	-		St	Coe	Mann-Kei	Man		(S)	Trend (80,



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental*

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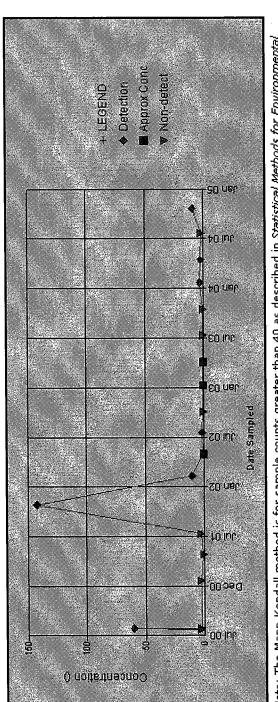
Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Vandalia, OH

Delphi Corporation

Vandalia Facility

in MW-422D
Trichloroethene
for
Trend
Jann-Kendall

Statistic	Value
Sample Count	21
Average	11,8
Standard Deviation	32.7
Coefficient of Variation	2.77
Mann-Kendall Positives/Negatives	76/113
Mann-Kendall S statistic	-37
Z Test Statistic	-1,106
Significance Level	-73.1%
Trend (80% Significance Threshold) No Trend	No Trend



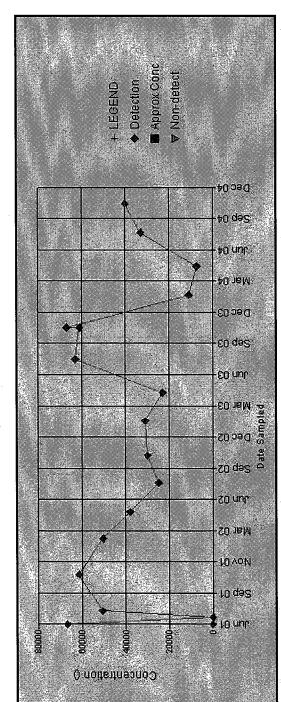
Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40.

Mann-Kendall Trend for Trichloroethene in MW-424D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Vandalia, OH

Delphi Corporation

Vandalia Facility

					l 1		1		—	
Value	18	36,618.1	22,646.1	0.618	75/78	£-	-0,07576	%0'9-	No Trend	
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) No Trend	



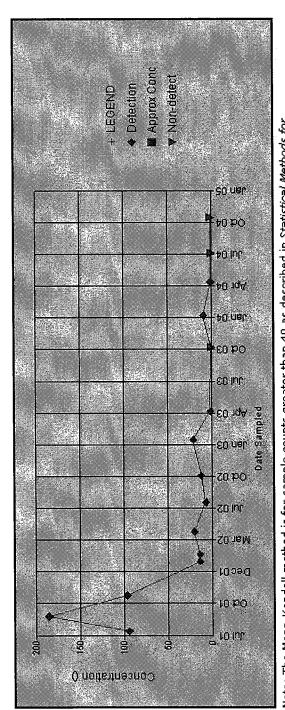
Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental sizes <=40,

Delphi Corporation
Vandalia Facility
Vandalia, OH
Trend Since Deep Bed

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-432D

Sample Count	Statistic	Value
Average 31.8 Standard Deviation 52.9 Coefficient of Variation 1.66 Mann-Kendall Positives/Negatives 17/88 Mann-Kendall S statistic -71 Z Test Statistic -3.464 Significance Level -99.9%	Sample Count	15
Standard Deviation 52.9 Coefficient of Variation 1.66 Mann-Kendall Positives/Negatives 17/88 Mann-Kendall S statistic -71 Z Test Statistic -3.464 Significance Level -99.9%	Average	31.8
Mann-Kendall Positives/Negatives 17/88 Mann-Kendall S statistic -71 Z Test Statistic -3.464 Significance Level -99.9%	Standard Deviation	52,9
Mann-Kendall Positives/Negatives 17/88 Mann-Kendall S statistic -71 Z Test Statistic -3.464 Significance Level -99.9%	Coefficient of Variation	1.66
Mann-Kendall S statistic -71 Z Test Statistic -3.464 Significance Level -99.9%	Mann-Kendall Positives/Negatives	17/88
2 Test Statistic -3.464 Significance Level -99.9%	Mann-Kendall S statistic	-71
Significance Level -99.9%	Z Test Statistic	-3,464
The A (One Cianificance Threshold) Decre	Significance Level	%6'66-
Itelia (ou % Significance in esnola) becrea	Trend (80% Significance Threshold) Decrease	Decrease



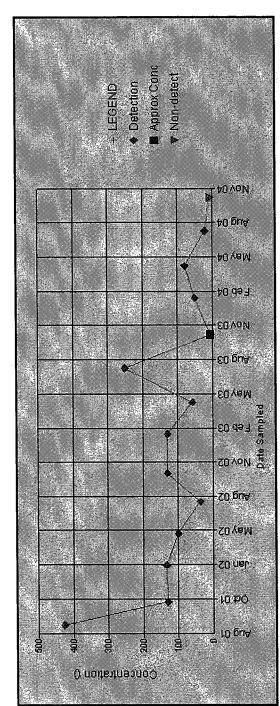
Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for*

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5/15/2006

Mann-Kendall Trend for Trichloroethene in MW-433D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in μ g\L

									as l
Yalue	14	111,3	112.0	1,01	20/68	-48	-2,587	%0'66-	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease



Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for

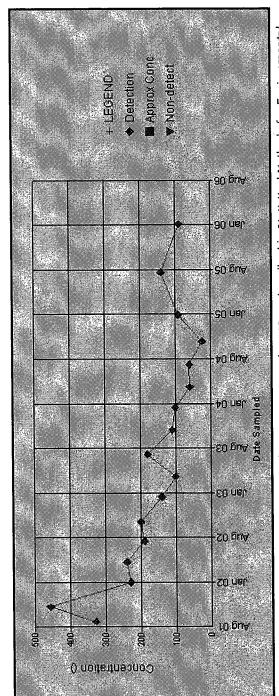
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Doc 5802-2

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-434D

							1.		
Value	17	160,9	108.9	0.677	20/114	-94	-3,837	-100.0%	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environmental* sizes <=40.

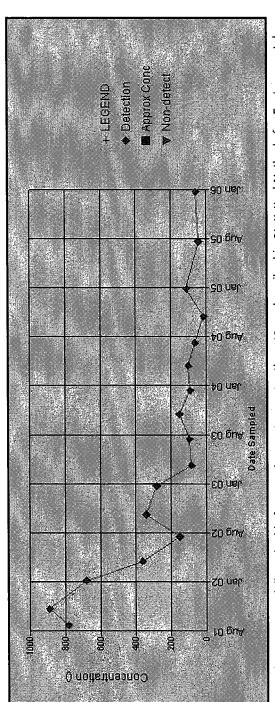
5/15/2006

Mann-Kendall Trend for Trichloroethene in MW-435D Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in μ g\L Vandalia, OH

Delphi Corporation

Vandalia Facility

Value	17	252.0	275.8	1.09	19/116	-97	-3,958	-100,0%	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for Environmental* sizes <=40

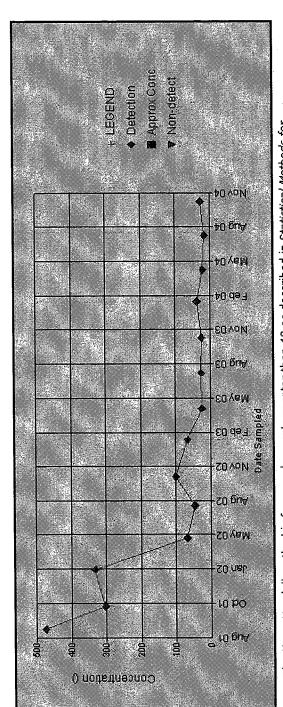
Haley & Aldrich, Inc.

Delphi Corporation
Vandalia Facility
Vandalia, OH

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-436D

Statistic	Value
Sample Count	14
Average	111.8
Standard Deviation	146.1
Coefficient of Variation	1,31
Mann-Kendall Positives/Negatives	14/77
Mann-Kendall S statistic	-63
Z Test Statistic	-3,394
Significance Level	%6'66-
Trend (80% Significance Threshold) Decrease	Decrease

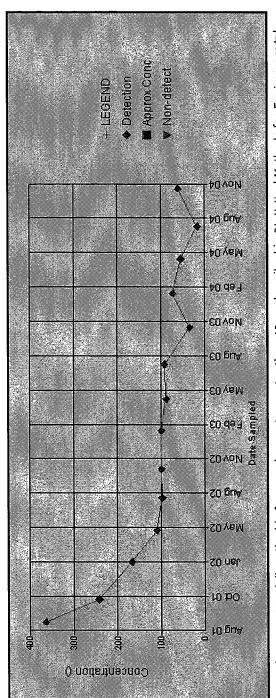


Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-437D

Value	14	114.3	91.1	262'0	8/82	-74	-4,002	-100.0%	Decrease
Statistic	Sample Count	Average	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease



Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental sizes <=40,

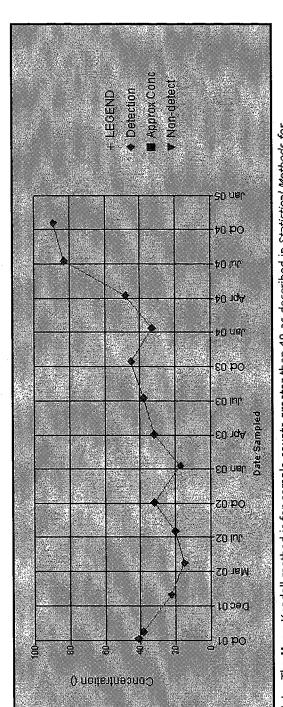
Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Vandalia, OH

Delphi Corporation

Vandalia Facility

-438D	
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II Trend	
nn-Kendall	
Ξ	

Statistic	Value
Sample Count	14
Average	39.6
Standard Deviation	22.2
Coefficient of Variation	0,560
Mann-Kendall Positives/Negatives	66/24
Mann-Kendall S statistic	42
Z Test Statistic	2,25
Significance Level	97.5%
Trend (80% Significance Threshold)Increase	Increase



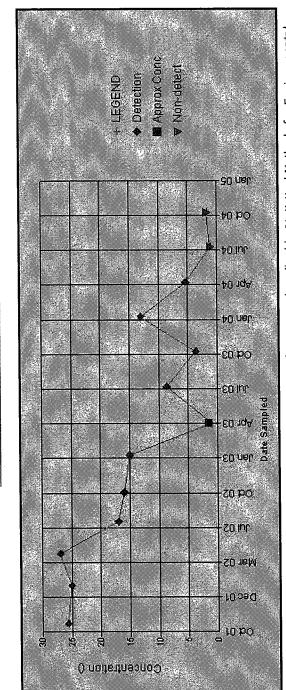
Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for* lookup table for sample sizes <=40.

Delphi Corporation Vandalia Facility Vandalia, OH

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-440D

Statistic	Yalue
Sample Count	13
Average	12.3
Standard Deviation	9.55
Coefficient of Variation	0.774
Mann-Kendall Positives/Negatives	11/67
Mann-Kendall S statistic	-56
Z Test Statistic	-3,355
Significance Level	%6'66-
Trend (80% Significance Threshold) Decrease	Decrease



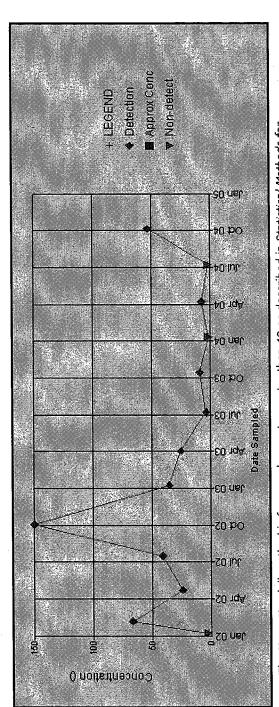
Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental sizes <=40

Delphi Corporation Vandalia Facility Vandalia, OH Trend Since Deep Bedrock Grour

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-441D

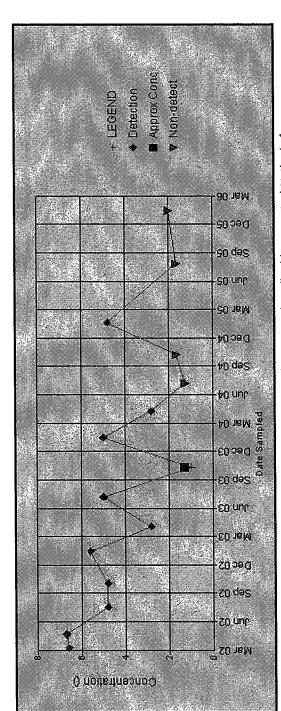
Statistic	Value
Sample Count	13
Average	32,3
Standard Deviation	41.3
Coefficient of Variation	1.28
Mann-Kendall Positives/Negatives	29/49
Mann-Kendall S statistic	-20
Z Test Statistic	-1,159
Significance Level	-75.4%
Trend (80% Significance Threshold) No Trend	No Trend



Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for*

Mann-Kendall Trend for Trichloroethene in MW-444D

Statistic	Value
Sample Count	15
Average	3.78
Standard Deviation	1,94
Coefficient of Variation	0.512
Mann-Kendall Positives/Negatives	24/75
Mann-Kendall S statistic	-51
Z Test Statistic	-2,495
Significance Level	-98.7%
Trend (80% Significance Threshold) Decrease	Decrease



Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for

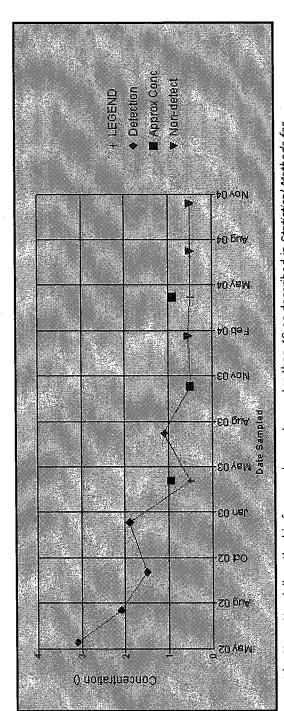
Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Vandalia, OH

Delphi Corporation

Vandalia Facility

Mann-Kendall Trend for Trichloroethene in MW-448D

Statistic	Value
Sample Count	11
Average	1.24
Standard Deviation	0.838
Coefficient of Variation	0.677
Mann-Kendall Positives/Negatives	5/49
Mann-Kendall S statistic	-44
Z Test Statistic	-3,358
Significance Level	-99.9%
Trend (80% Significance Threshold) Decrease	Decrease

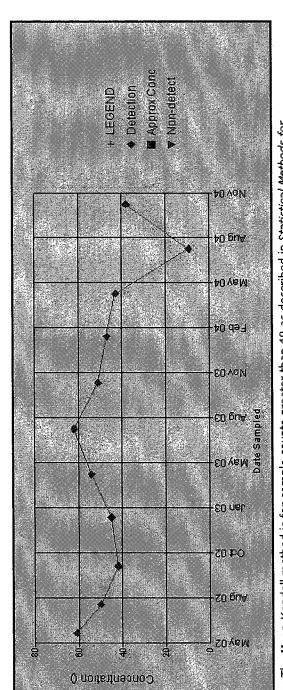


Note: The Mann-Kendall method is for sample counts greater than 40 as described in *Statistical Methods for Environmental Pollution Monitoring* (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40.

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L Delphi Corporation Vandalia Facility Vandalia, OH

Mann-Kendall Trend for Trichloroethene in MW-449D

Yalue	11	45.7	14.2	0,311	16/39	-23	-1,713	-91.3%	Decrease
Statistic	Sample Count	Åverage	Standard Deviation	Coefficient of Variation	Mann-Kendall Positives/Negatives	Mann-Kendall S statistic	Z Test Statistic	Significance Level	Trend (80% Significance Threshold) Decrease

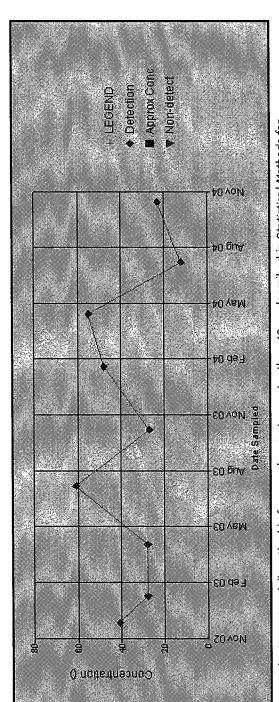


Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in S*tatistical Methods for*

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

n MW-451D	
Trichloroethene in I	
Trend for	
Mann-Kendall T	

StatisticValueSample Count9Average35.9Standard Deviation16.2Coefficient of Variation0.452Mann-Kendall Positives/Negatives13/22Mann-Kendall S statistic-9	Z Test Statistic -0.8386 Significance Level -59.8%
Sample Sample Aver Standard Coefficient Mann-Kendall Pos	Z Test Significan



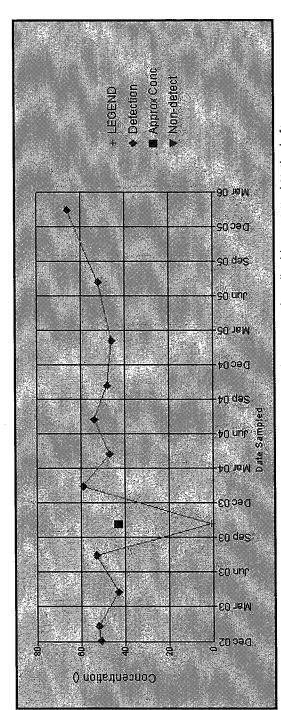
Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40. Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for

Delphi Corporation Vandalia Facility Vandalia, OH Trend Since Deen Bedrock

Trend Since Deep Bedrock Groundwater Migration Control Start in April 2000 - Concentration in µg\L

Mann-Kendall Trend for Trichloroethene in MW-453D

Statistic	Yalue	
Sample Count	12	
Average	51.2	
Standard Deviation	6.62	
Coefficient of Variation	0.129	
Mann-Kendall Positives/Negatives	39/25	
Mann-Kendall S statistic	14	
Z Test Statistic	968'0	
Significance Level	62,9%	
Trend (80% Significance Threshold) No Trend	No Trend	



Note: The Mann-Kendall method is for sample counts greater than 40 as described in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample counts less than or equal to 40, a lookup table of the Mann Kendall S statistic and the sample count should be used. However, Kendall (1975) indicates that the >40 method may be used for sample counts as low as 10 unless there are many identical values. A future version of Geode will include the lookup table for sample sizes <=40.

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APPENDIX B

Sugar Rock Monitoring Well TCE Normality Analysis

STATISTICAL EVALUATION USING NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Facility - Vandalia, OH LOCATION: CSX-18D COMPOUND: Trichloroethene COMMENT: Sample Normal Distribution Shapiro-Wilk Normality Test Concentration Probability Residual Coefficient (a) 0.05 -1.73 39.85 0.4542 18.10 0.11 8.3 -1.38 2.39 0.3126 0.75 0.11 12.5 -1.15 2.39 0.2563 0.61 0,11 16.7 -0.97 2.39 0.2139 0.51 5 0.11 20.8 -0.81 2.39 0.1787 0.43 2.39 0.11 25.0 -0.67 0.1480 0.35 0.11 29.2 -0.55 2.39 0.1201 0.29 0.11 33.3 -0.43 2.39 0.0941 0.22 0.14 37.5 -0.32 0.64 0.0696 0.04 0.0459 41.7 -0.21 0.51 10 0.27 0.02 45.8 -0.10 0.0228 0.01 11 0.28 0.28 12 0.5 50.0 0.00 0.0000 13 0.56 54.2 0.10 0.0000 14 0.78 58.3 0.21 0.0000 15 0.78 0.0000 62.5 0.32 16 2.50 66.7 0.43 Shapiro-Wilk Sum: 21.338 17 2.50 70.8 0.55 2.50 0.309 18 75.0 0.67 Shapiro-Wilk W: 19 2.50 79.2 0.81 Critical Value: 5% Shapiro-Wilk Comparison W: 0.9140 20 2.50 83.3 0.97 21 2.50 87.5 1.15 2.50 91.7 1.38 Normality?: Does Not Appear Normally Distributed 23 39.90 95.8 1.73 24 25 26 27 28 29 30 Number of Samples: 23 Sample Mean: 2.675 Sample Standard Devation: 8.183 25% Quatrile: Required Level of Confidence: 95% 0.1 50% Quatrile(median): 0.5 2.5 5.61 17.0 Upper Confidence Limit: 75% Quatrile: Upper Tolerance Limit: 2.4 6.1 Inter-Quatrile Range: Upper Cutoff. y = 1.5801x + 45.773PROBABILITY PLOT $R^2 = 0.2094$. 30.0 20.0 ■ Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Facility - Vandalia, OH LOCATION: CSX-18D COMPOUND: Trichloroethene COMMENT: Sample Normal Distribution Shapiro-Wilk Normality Test Log Conc. Probability Quatrile Residual Coefficient (a) 1.32 -1.30 42 -1.73 2.90 0.4542 -0.96 8.3 -1.38 1.36 0.3126 0.42 -0.96 12.5 -1.15 1.36 0.2563 0.35 4 -0.96 16.7 -0.97 1.36 0.2139 0.29 0.24 5 -0.96 20.8 -0.81 1.36 0.1787 25.0 1.36 0.1480 0.20 6 -0.96 -0.67 0.1201 0.16 -0.96 29.2 -0.55 1.36 33.3 1.36 0.0941 0.13 8 -0.96 -0.43 37.5 0.75 0.0696 0.05 -0.85 -0.320.0459 -0.57 -0.21 10 41.7 0.46 0.02 -0.55 45.8 -0.10 0.30 0.0228 0.01 11 12 -0.30 50.0 0.00 0.0000 0.0000 13 -0.25 54.2 0.10 -0.11 14 58.3 0.21 0.0000 15 -0.11 62.5 0.32 16 0.40 66.7 0.43 Shapiro-Wilk Sum: 3.194 17 0.40 70.8 0.55 Shapiro-Wilk W: 75.0 0.67 0.882 18 0.40 79.2 0.81 19 0.40 Critical Value: 5.0% Shapiro-Wilk Comparison W: 83.3 0.97 0.9140 20 0.40 21 22 0.40 87.5 1.15 0.40 91.7 1.38 Normality?: Does Not Appear LogNormally Distributed 23 1.60 95.8 1.73 24 25 26 27 28 29 30 log() Number of Samples: 23 Sample Mean: -0.277 Sample Standard Devation: 0.725 log() Natural Scale 25% Quatrile: Required Level of Confidence: 95% Upper Confidence Limit: -0.02 50% Quatrile(median): 0.5 2.5 Upper Tolerance Limit: 9.9 75% Quatrile: 1.00 2.39 Inter-Quatrile Range: Upper Cutoff: 6.09 v = 36.684x + 60.158 PROBABILITY PLOT $R^2 = 0.8861$ • -1.00 -0.50 0.00 0.50 1.00 1.50 Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING NORMAL DISTRIBUTION

PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH

LOCATION: MW-301D

COMPOUND: Trichloroethene

COMMENT:

S	ample
Order	Concentration
1	0.22
2	2.00
3	2.30
4	2.50
5	5.00
6	6.90
7	23.00
8	29.00
9	110.00
10	350.00
11	390.00
12	440.00
13	490.00
14	550.00
15	680.00
16	920.00
17	1520.00
18	1900.00
19	2300.00
20	2400.00
21	2880.00
22	2910.00
23	2940.00
24	3080.00
25	
26	4930.00
27	5460.00
28	8240.00
29	
30	

Normal D	
Probability	Quatrile
3.4	-1.82
6.9	-1.48
10.3	-1.26
13.8	-1.09
17.2	-0.94
20.7	-0.82
24.1	-0.70
27.6	-0.60
31.0	-0.49
34.5	-0.40
37.9	-0.31
41.4	-0.22
44.8	-0.13
48.3	-0.04
51.7	0.04
55.2	0.13
58.6	0.22
62.1	0.31
65.5	0.40
69.0	0.49
72.4	0.60
75.9	0.70
79.3	0.82
82.8	0.94
86.2	1.09
89.7	
93.1	1.48
96.6	
90.0	1.02

Shap	oiro-Wilk Normality	
Residual	Coefficient (a)	Product (b)
8239.78	0.4328	3566.18
5458.00	0.2992	1633.03
4927.70	0.2510	1236.85
4057.50	0.2151	872.77
3075.00	0.1857	571.03
2933.10	0.1601	469.59
2887.00	0.1372	396.10
2851.00	0.1162	331.29
2290.00	0.0965	220.99
1950.00	0.0778	151.71
1510.00	0.0598	90.30
1080.00	0.0424	45.79
430.00	0.0253	10.88
130.00	0.0084	1.09
	0.0000	

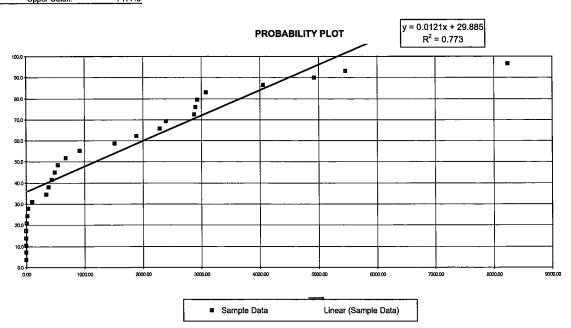
9597.587	
0.801	
5%	
0.9240	
	0.801 5%

Normality?: Does Not Appear Normally Distributed

Number of Samples:	28
Sample Mean:	1665.033
Sample Standard Devation:	2064.411

25% Quatrile:	27.5
50% Quatrile(median):	615.0
75% Quatrile:	2887.5
Inter-Quatrile Range:	2860.0
Linner Cutoff	7177.5

Required Level of Confidence:	95%
Upper Confidence Limit:	2329.55
Upper Tolerance Limit:	5243.6



STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH LOCATION: MW-301D COMPOUND: Trichloroethene COMMENT: Normal Distribution Shapiro-Wilk Normality Test Sample Residual Coefficient (a) Order Log Conc. Probability Quatrile -0.66 -1.82 4.57 0.4328 1.98 0.30 6.9 -1.48 3.44 0.2992 1.03 0.36 10.3 -1.26 3.33 0.2510 0.84 0.40 13.8 -1.09 3.21 0.2151 0.69 0.70 17.2 -0.94 2.79 0.1857 0.52 0.84 20.7 -0.82 2.63 0.1601 0.42 1.36 24.1 -0.70 2.10 0.1372 0.29 1.46 27.6 -0.60 2.00 0.1162 0.23 9 2.04 31.0 -0.49 1.34 0.0965 0.13 10 2.54 34.5 -0.40 0.82 0.0778 0.06 11 2.59 37.9 -0.31 0.69 0.0598 0.04 0.0424 12 2.64 41.4 -0.22 0.54 0.02 0.0253 13 2.69 2.74 44 8 -0.130.27 0.01 0.09 0.0084 14 48.3 -0.040.00 15 2.83 51.7 0.04 0.00 16 2.96 55.2 0.13 17 3.18 58.6 0.22 Shapiro-Wilk Sum: 6.258 18 3.28 62.1 0.31 Shapiro-Wilk W: 0.866 19 3.36 65.5 0.40 Critical Value: 5.0% 20 3.38 69.0 0.49 Shapiro-Wilk Comparison W: 0.9240 21 3.46 72.4 0.60 22 3.46 75.9 0.70 Normality?: Does Not Appear LogNormally Distributed 23 3.47 79.3 0.82 24 3.49 82.8 0.94 25 3.61 86.2 1.09 26 3.69 89.7 1.26 27 3.74 93.1 1.48 28 3.92 96.6 1.82 29 30 log() Number of Samples: 28 Sample Mean: 2.423 Sample Standard Devation: 1.294 Natural Scale log() Required Level of Confidence: 27.5 615.0 25% Quatrile: 95% Upper Confidence Limit: 50% Quatrile(median): 2.84 46366.5 2887.5 4.67 75% Quatrile: Upper Tolerance Limit: Inter-Quatrile Range: 2860.00 7177.50 Upper Cutoff: PROBABILITY PLOT = 20.561x + 0.176 $R^2 = 0.8798$ Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING NORMAL DISTRIBUTION

PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH

LOCATION: MW-407D

COMPOUND: Trichloroethene

COMMENT:

Sample	
Order	Concentration
1	125
2	190
3	197
4	200
5	210
6	216
7	220
8	223
9	
_10	240
11	250
12	
13	280
14	280
15	288
16	334
17	350
18	350.00
19	364.00
20	370.00
21	
22	
23	
24	
25	
26	
27	
28	3
29	
30	

Normal D	
Probability	Quatrile
4.5	1.69
9.1	-1.34
13.6	-1.10
18.2	-0.91
22.7	-0.75
27.3	-0.60
31.8	-0.47
36.4	-0.35
40.9	-0.23
45.5	-0.11
50.0	0.00
54.5	0.11
59.1	0.23
63.6	0.35
68.2	0.47
72.7	0.60
77.3	0.75
81.8	0.91
86.4	1.10
90.9	1.34
95.5	1.69
	-
	l

Shap	oiro-Wilk Normality	Test
Residual	Coefficient (a)	Product (b)
265.00	0.4643	123.04
180.00	0.3185	57.33
167.00	0.2578	43.05
150.00	0.2119	31.79
140.00	0.1736	24.30
118.00	0.1399	16.51
68.00	0.1092	7.43
57.00	0.0804	4.58
52.00	0.0530	2.76
22.00	0.0263	0.58
	0.0000	
	0.0000	
	0.0000	
	0.0000	
	0.0000	

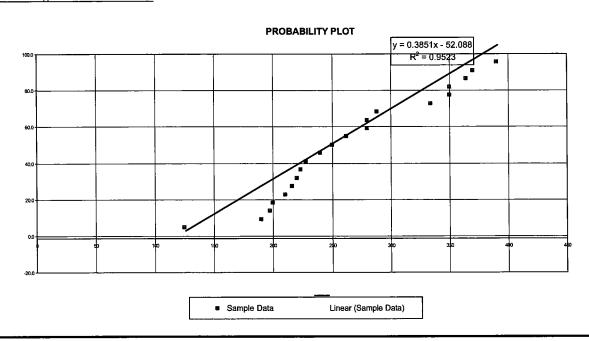
Shapiro-Wilk Sum:	311.362	
Shapiro-Wilk W:	0.949	
Critical Value:	5%	
Shapiro-Wilk Comparison W:	0.9080	

Normality?: Appears Normally Distributed

Number of Samples:	21
Sample Mean:	265.095
Sample Standard Devation:	71.470

25% Quatrile:	216.0
50% Quatrile(median):	250.0
75% Quatrile:	334.0
Inter-Quatrile Range:	118.0
Upper Cutoff:	511.0

Required Level of Confidence:	95%
Upper Confidence Limit:	291.99
Upper Tolerance Limit:	391.3



STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH LOCATION: MW-407D **COMPOUND:** Trichloroethene COMMENT: Normal Distribution Shapiro-Wilk Normality Test Sample Order Log Conc. Probability Quatrile Residual Coefficient (a) -1.69 0.49 0.4643 0.23 2.10 2.28 9.1 -1.34 0.29 0.3185 0.09 2.29 13.6 -1.10 0.27 0.2578 0.07 -0.91 0.24 0.2119 0.05 2.30 18.2 2.32 22.7 -0.75 0.22 0.1736 0.04 2.33 27.3 -0.60 0.19 0.1399 0.03 2.34 31.8 -0.47 0.12 0.1092 0.01 2.35 36.4 -0.35 0.10 0.0804 0.01 2.36 40.9 -0.23 0.09 0.0530 0.00 10 2.38 45.5 -0.11 0.04 0.0263 0.00 11 2.40 50.0 0.00 0.0000 12 2.42 54.5 0.11 0.0000 13 2.45 59.1 0.23 0.0000 14 2.45 63.6 0.35 0.0000 15 2.46 68.2 0.47 0.00 16 2.52 72.7 0.60 17 2.54 77.3 0.75 Shapiro-Wilk Sum: 0.533 18 2.54 81.8 0.91 Shapiro-Wilk W: 0.946 19 2.56 86.4 1.10 Critical Value: 5.0% 20 2.57 90.9 1.34 Shapiro-Wilk Comparison W: 0.9080 2.59 1.69 21 95.5 22 Normality?: Appears LogNormally Distributed 23 24 25 26 27 28 29 30 log() Number of Samples: 2.408 Sample Mean: Sample Standard Devation: 0.123 log() Natural Scale 25% Quatrile: 216.0 Required Level of Confidence: 95% 50% Quatrile(median): 250.0 Upper Confidence Limit: 2.45 420.7 75% Quatrile: 334.0 Upper Tolerance Limit: 2.62 Inter-Quatrile Range: 118.00 Upper Cutoff: 511.00 PROBABILITY PLOT y = 221.31x - 482.82 $R^2 = 0.9257$ Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH **LOCATION: MW-408D** COMPOUND: Trichloroethene COMMENT: Sample Normal Distribution Shapiro-Wilk Normality Test Order Concentration Probability Residual Coefficient (a) Product (b) 190.00 -1.69 1350.00 0.4643 626.81 210.00 9.1 -1.34 800.00 0.3185 254.80 260.00 13.6 -1.10 559.00 0.2578 144.11 290.00 18.2 -0.91 496.00 0.2119 105.10 310.00 22.7 -0.75 314.00 0.1736 54.51 0.1399 42.39 320.00 27.3 -0.60 303.00 31.01 330.00 31.8 -0.47 284.00 0.1092 0.0804 14.07 8 370.00 36.4 -0.35 175.00 0.0530 5.83 9 410.00 40.9 -0.23110.00 -0.11 37.00 0.0263 0.97 10 433.00 45.5 0.00 11 440.00 50.0 0.0000 12 470.00 54.5 0.11 0.0000 13 520.00 59.1 0.23 0.0000 14 545.00 63.6 0.35 0.0000 614.00 0.0000 15 68.2 0.47 16 623.00 72.7 0.60 Shapiro-Wilk Sum: 1279.604 17 624.00 77.3 0.75 Shapiro-Wilk W: 0.833 18 786.00 81.8 0.91 19 819.00 86.4 1.10 Critical Value: 5% Shapiro-Wilk Comparison W: 0.9080 20 1010.00 90.9 1.34 21 1540.00 95.5 1.69 Normality?: Does Not Appear Normally Distributed 23 25 26 27 28 29 30 Number of Samples: Sample Mean: 529.238 Sample Standard Devation: 313.570 Required Level of Confidence: 320.0 25% Quatrile: 50% Quatrile(median): 647.25 440.0 Upper Confidence Limit: 623.0 Upper Tolerance Limit: 1082.8 75% Quatrile: Inter-Quatrile Range: 303.0 1077.5 Upper Cutoff: v = 0.0785x + 8.4558 PROBABILITY PLOT $R^2 = 0.7617$ 30.0 20.0 400.00 600.00 1000.00 Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Facility - Vandalia, OH LOCATION: MW-408D **COMPOUND:** Trichloroethene COMMENT: Normal Distribution Shapiro-Wilk Normality Test Sample Residual Coefficient (a) Product (b) Order Log Conc. Probability -1 69 0.91 0.42 2.28 0.4643 0.22 9.1 -1.34 0.68 0.3185 2.32 0.13 2.41 13.6 -1.100.50 0.2578 0.2119 0.09 2.46 18.2 -0.910.43 2.49 -0.750.30 0.1736 0.05 5 22.7 0.29 2.51 27.3 -0.60 0.1399 0.04 2.52 0.27 0.03 31.8 -0.470.1092 -0.35 0.17 0.0804 0.01 2.57 2.61 36.4 -0.23 0.0530 0.01 40.9 0.10 0.00 10 45.5 -0.11 0.04 0.0263 2.64 2.64 0.00 0.0000 11 50.0 2.67 0.0000 12 54.5 0.11 0.0000 13 2.72 59.1 0.23 14 2.74 0.35 0.0000 63.6 15 2.79 0.47 0.00 68.2 16 2.79 72.7 0.60 Shapiro-Wilk Sum: 1.002 2.80 0.75 17 77.3 18 2.90 Shapiro-Wilk W: 0.984 81.8 0.91 Critical Value: 5.0% 19 1,10 2.91 86.4 Shapiro-Wilk Comparison W: 20 1.34 0.9080 3.00 90.9 21 22 3.19 95.5 1.69 Normality?: Appears LogNormally Distributed 23 24 25 26 27 28 29 30 log() Number of Samples: 21 2.665 Sample Mean: Sample Standard Devation: 0.226 Natural Scale log() 25% Quatrile: 320.0 Required Level of Confidence: 95% 440.0 Upper Confidence Limit: 2.75 50% Quatrile(median): 623.0 Upper Tolerance Limit: 1157.0 75% Quatrile: 303.00 Inter-Quatrile Range: Upper Cutoff: 1077.50 y = 121.79x - 274.54 **PROBABILITY PLOT** $R^2 = 0.9514$ 2.00 1.00 Sample Data Linear (Sample Data)

STATISTICAL EVALUATION USING NORMAL DISTRIBUTION

PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH

LOCATION: MW-409D

COMPOUND: Trichloroethene

COMMENT:

S	ample
Order	Concentration
1	1.4
2	1.4 7.1
2 3	7.8
4	17
5	21
6	27
7	28 38
8	38
9	54
10	61
11	75.7
12	90.4
13	100
14	120
14 15	133
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
30	

Normal Distribution	
Probability	Quatrile
6.3	-1.53
12.5	-1.15
18.8	-0.89
25.0	-0.67
31.3	-0.49
37.5	-0.32
43.8	-0.16
50.0	0.00
56.3	0.16
62.5	0.32
68.8	0.49
75.0	0.67
81.3	0.89
87.5	1.15
93.8	1.53
	
	
	
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Shapiro-Wilk Normality Test		
Residual	Coefficient (a)	Product (b)
131.60	0.5150	67.77
112.90	0.3306	37.32
92.20	0.2495	23.00
73.40	0.1878	13.78
54.70	0.1353	7.40
34.00	0.0880	2.99
26.00	0.0433	1.13
	0.0000	
	0.0000	
	0.0000	_
	0.0000	
	0.0000	
	0.0000	
	0.0000	
	0.0000	

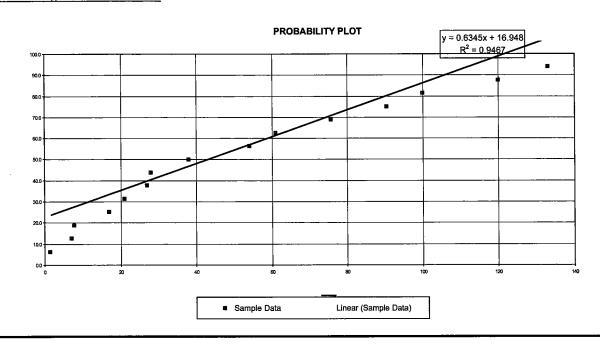
153.406	
0.915	
5%	
0.8810	
	0.915 5%

Normality?: Appears Normally Distributed

Number of Samples:	15
Sample Mean:	52.093
Sample Standard Devation:	42 865

25% Quatrile:	19.0
50% Quatrile(median):	38.0
75% Quatrile:	83.1
Inter-Quatrile Range:	64.1
Upper Cutoff:	179.1

Required Level of Confidence:	95%
Upper Confidence Limit:	71.59
Upper Tolerance Limit:	130.1



STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Facility - Vandalia, OH LOCATION: MW-409D COMPOUND: Trichloroethene

COMMENT:

s	ample
Order	Log Conc.
1	0.15
2	0.85
3	0.89
4	1.23
5	1.23 1.32
6	1.43
7	1.45
8	1.58
9	1.73 1.79
10	1.79
11	1.88
12	1.96
13	2.00
14	2.08
15	2.12
16	
17	1
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

Normal D	
Probability	Quatrile
6.3	-1.53
12.5	-1.15
18.8	-0.89
25.0	-0.67
31.3	-0.49
37.5	-0.32
43.8	-0.16
50.0	0.00
56.3	0.16
62.5	0.32
68.8	0.49
75.0	0.67
81.3	0.89
87.5	1.15
93.8	1.53
	··

Shapiro-Wilk Normality Test	
Coefficient (a)	Product (b)
0.5150	1.02
0.3306	0.41
0.2495	0.28
0.1878	0.14
0.1353	0.08
0.0880	0.03
0.0433	0.01
0.0000	
0.0000	
0.0000	
0.0000	
0.0000	
0.0000	
0.0000	
0.00	
	Coefficient (a) 0.5150 0.3306 0.2495 0.1878 0.1353 0.0880 0.0433 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000

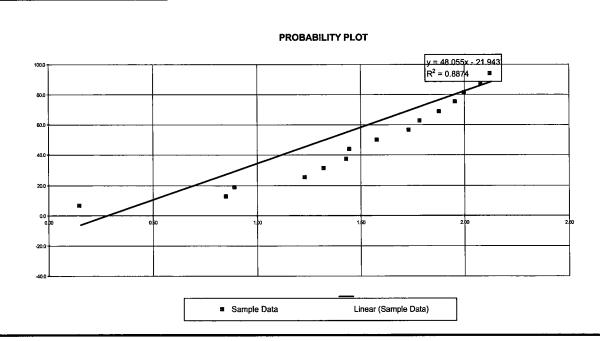
Shapiro-Wilk Sum:	1.956	
Shapiro-Wilk W:	0.910	
Critical Value:	5.0%	
Shapiro-Wilk Comparison W:	0.8810	

Normality?: Appears LogNormally Distributed

	iog()
Number of Samples:	15
Sample Mean:	1.497
Sample Standard Devation:	0.548

25% Quatrile:	19.0
50% Quatrile(median):	38.0
75% Quatrile:	83.1
Inter-Quatrile Range:	64.05
Unner Cuteff	470 42

	log()	Natural Scale
Required Level of Confidence:	95%	
Upper Confidence Limit:	1.75	
Upper Tolerance Limit:	2.49	311.8



STATISTICAL EVALUATION USING NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH LOCATION: MW-410D **COMPOUND:** Trichloroethene COMMENT: Shapiro-Wilk Normality Test Normal Distribution Sample Coefficient (a) 0.5150 Product (b) Residual Order Concentration Probability Quatrile 1320.00 679.80 -1.53 440 6.3 370.27 -1.15 1120.00 0.3306 450 12.5 -0.89 0.2495 480 18.8 980.00 244.51 93.90 540 25.0 -0.67500.00 0.1878 -0.49170.00 0.1353 23.00 590 31.3 610 37.5 -0.32 120,00 0.0880 10.56 43.8 0.0433 -0.16 30.00 1.30 700 8 700 730 50.0 0.00 0.0000 0.0000 56.3 0.16 0.0000 10 730 62.5 0.32 760 0.0000 0.49 11 68.8 0.0000 12 1040 0.67 75.0 0.0000 13 1460 81.3 0.89 0.0000 14 1570 1.15 87.5 1.53 0.0000 15 93.8 16 Shapiro-Wilk Sum: 1423.342 17 Shapiro-Wilk W: 0.804 18 19 Critical Value: 5% Shapiro-Wilk Comparison W: 0.8810 20 21 22 Normality?: Does Not Appear Normally Distributed 23 24 25 26 27 28 29 30 15 837.333 Number of Samples: Sample Mean: Sample Standard Devation: 424.306 Required Level of Confidence: 95% 25% Quatrile: 565.0 50% Quatrile(median): Upper Confidence Limit: 1030.29 700.0 Upper Tolerance Limit: 75% Quatrile: 900.0 Inter-Quatrile Range: 335.0 Upper Cutoff: 1402.5 **PROBABILITY PLOT** v = 0.0586x + 0.916 $R^2 = 0.7919$. 80.0 . 70.0 40.0 20.0 600 Linear (Sample Data) Sample Data

STATISTICAL EVALUATION USING LOG-NORMAL DISTRIBUTION PROJECT: Delphi Corporation - Vandalia Faciltiy - Vandalia, OH LOCATION: MW-410D **COMPOUND:** Trichloroethene COMMENT: Sample Normal Distribution Shapiro-Wilk Normality Test Coefficient (a) Order Log Conc Probability Quatrile -1.53 0.60 0.5150 0.31 2.64 12.5 -1.15 0.54 0.3306 0.18 2.65 18.8 -0.89 0.48 0.2495 0.12 2.68 -0.67 0.28 0.1878 0.05 25.0 2.73 2.77 31.3 -0.49 0.11 0.1353 0.01 -0.32 80.0 0.0880 0.01 2.79 37.5 43.8 -0.16 0.02 0.0433 0.00 2.85 2.85 0.00 0.0000 2.86 56.3 0.16 0.0000 10 2.86 62.5 0.32 0.0000 11 2.88 68.8 0.49 0.0000 12 3.02 75.0 0.67 0.0000 13 3.16 81.3 0.89 0.0000 0.0000 14 3.20 87.5 1.15 15 3.25 93.8 1.53 0.00 16 17 Shapiro-Wilk Sum: 0.686 18 Shapiro-Wilk W: 0.895 19 Critical Value: 5.0% 20 Shapiro-Wilk Comparison W: 0.8810 21 Normality?: Appears LogNormally Distributed 22 24 25 26 27 28 29 log() 15 Number of Samples: 2.879 Sample Mean: 0.194 Sample Standard Devation: Natural Scale log() 95% 25% Quatrile: 565.0 Required Level of Confidence: 50% Quatrile(median): 700.0 Upper Confidence Limit: 2.97 1704.4 3.23 75% Quatrile: 900.0 Upper Tolerance Limit: Inter-Quatrile Range: 335.00 Upper Cutoff: 1402.50 y = 137.1x - 344.73 PROBABILITY PLOT $R^2 = 0.9032$. 10.0 3.00

Sample Data

Linear (Sample Data)